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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/446,839	03/24/2000	Ernst Michael Winter	45/276 LI/SCH	2969

30996 7590 12/10/2002

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EXAMINER

HO, THOMAS Y

ART UNIT PAPER NUMBER

3677

DATE MAILED: 12/10/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/446,839

Applicant(s)

WINTER ET AL.

Examiner

Thomas Y Ho

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-- Th MAILING DATE of this communication appears on the cover sheet with th correspond nce address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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DETAILED ACTION

Priority

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Germany on 04/23/1998. It is noted, however, that applicant has not filed a certified copy of the 29807331.5 application as required by 35 U.S.C. 119(b).

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Germany on 09/23/1998. It is noted, however, that applicant has not filed a certified copy of the 29817072.8 application as required by 35 U.S.C. 119(b).

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Germany on 10/01/1998. It is noted, however, that applicant has not filed a certified copy of the 29817487.1 application as required by 35 U.S.C. 119(b).

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Germany on 11/12/1998. It is noted, however, that applicant has not filed a certified copy of the 29820231.1 application as required by 35 U.S.C. 119(b).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 14-17, 22-23, and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Reber USPN4725511.

As to claim 14, Reber discloses an ornamental stone comprising:

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- A body 10.
- Said body 10 comprising a natural or synthetic stone.
- Said stone 10 being suitable only for technical or industrial purposes. This limitation holds no patentable weight because it is merely intended use of the disclosed material, and fails to further define the invention. Furthermore, it is well known that silicon is a synthetic stone, and can be used for technical purposes as a semiconductor.
- Said stone 10 has at least one visible surface (top edge of 10) adapted to serve as a support for a structured material layer 14.

As to claim 15, Reber discloses an ornamental stone wherein:

- The visible surface (top edge of 10) is smooth. It can be seen in Fig.1 that the visible surface (top edge of 10) is a straight line, denoting smoothness, and can be compared with the surface of another layer (top edge of 28), which is indicated as rough with an uneven line.

As to claim 16, Reber discloses an ornamental stone wherein:

- The material layer 14 is shiny. The material layer disclosed by Reber is composed of gold, aluminum, silver, etc. which are commonly known to be shiny and to reflect light (col.3, ln.26-39).

As to claim 17, Reber discloses an ornamental stone wherein:

- The material layer 14 comprises a precious metal or titanium nitride. The material layer disclosed by Reber is composed of gold, aluminum, silver, etc. or any other precious metal (col.3, ln.26-39).

As to claim 22, Reber discloses an ornamental stone, which has:

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- As the visible surface (top edge of 10) one or more surfaces that are level, concave, convex, or a mixture thereof.

As to claim 23, Reber discloses an ornamental stone wherein:

- A transparent protective layer 28 is disposed on the material layer 14 (col.6, ln.1-19).

As to claim 25, Reber discloses an ornamental stone, which has:

- A body adapted to form a face of a clock (col.7, ln.46-53).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 18-19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reber USPN4725511 in view of Lach USPN5423714.

As to claim 18, Reber fails to disclose or suggest:

- A metallic layer as a retention intermediary is disposed between the visible surface and the material layer.

Lach discloses to use a thin coating of chromium-nickel or other suitable metal to help bond a metal coating on a substrate to ensure proper bonding occurs (Col.2, Ln.30-37). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the layers disclosed by Reber to include a metallic intermediary layer, as taught by Lach, to ensure proper bonding of the material layer onto the substrate.

As to claim 19, Reber fails to disclose or suggest the following limitations:

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- The retention intermediary is a titanium or chromium layer.

Lach discloses the use of an intermediary layer consisting of chromium-nickel (used as an example) as an adhesive coating followed by a coating of a precious metal (col.2, ln.30-37). It would have been obvious to one of ordinary skill in the art to modify the layers disclosed by Reber to include a metallic intermediary layer of chromium, as taught by Lach, to ensure proper bonding of the material layer onto the substrate.

As to claim 21, Reber fails to disclose or suggest the following limitations:

- A body in the form of a polycrystalline diamond aggregate with said visible face as a support for the material layer.

Lach discloses that a polycrystalline diamond mounted onto a suitable substrate (col.2, ln.1-8) can be coated with a material layer. Furthermore, Lach also discloses the specific advantages of using a polycrystalline diamond for ornaments (col.1, ln.8-17). It would have been obvious to modify the ornamental stone disclosed by Reber to have a polycrystalline diamond as the visible surface for support of a material layer, as taught by Lach, because polycrystalline diamond is more precious and has better optical properties (col.1, ln.7-17).

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reber USPN4725511 in view of Nassau USPN5882786.

As to claim 20, Reber fails to disclose or suggest:

- A body in the form of a diamond layer made via a CVD process with said visible face as a support for the material layer.

Reber discloses an ornamental stone, which has a silicon substrate. Nassau discloses a gemstone that is formed of silicon carbide coated with a diamond coating via a CVD process

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(col.2, ln.2-18, ln.55-63). Nassau also discloses that a coating of diamond is used to produce a harder surface that resists damage (col.3, ln.59-63). It would have been obvious to modify the ornamental stone disclosed by Reber to have a diamond layer on top of the silicon substrate, as taught by Nassau, because the diamond coating makes the ornamental stone less susceptible to damage.

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reber USPN4725511 in view of Konig USPN5587233.

As to claim 24, Reber fails to disclose or suggest the following limitations:

- The protective layer is a CVD layer and is made of corundum or diamond.

Reber discloses the use of a transparent protective coating 28 on a substrate. Konig discloses a substrate body made of diamond coated through CVD with at least one aluminum oxide surface layer, with aluminum oxide being commonly called corundum, for wear resistance (col.2, ln.31-46). It would have been obvious to modify the protective coating disclosed by Reber to be made of corundum, as taught by Konig, so the ornamental stone assembly is more resistant to wear and is better protected.

Response to Arguments

Applicant's arguments filed 10/15/02 have been fully considered but they are not persuasive.

As to claim 14, Applicant argues that the prior art fails to disclose or suggest: "...said stone being suitable only for technical or industrial purposes..." Applicant argues that Reber USPN472511 describes a jewelry stone whose body comprises a semiconductor substrate, namely a silicon wafer, and that a silicon wafer is not a natural or synthetic stone suitable only

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for technical or industrial purposes. The Examiner asserts that silicon is a “natural or synthetic stone” and that the limitation “...suitable only for technical or industrial purposes...” holds no patentable weight because it is an intended use claim. Furthermore, it is well known in the art that silicon can be made synthetically (or found in compounds in nature) and can be used for technical or industrial purposes, such as in the production of semiconductor devices.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a theme or picture is produced on the visible layer of the stone) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The Lach reference is not necessary to reject claim 14, and is only a modifying reference used to reject a depending claim.

With respect to the Nassau and Konig reference, applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. The Examiner notes that the applicant is merely reciting information disclosed in the prior art.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

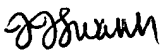
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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas Y. Ho whose email address is thomas.ho@uspto.gov and telephone number is (703) 305-4556. The examiner can normally be reached on M-F 9:30AM-6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J.J. Swann can be reached on (703) 306-4115. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9327.

TYH
December 3, 2002


J. J. SWANN
SUPERVISORY PATENT EXAMINER
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